

Recommendation(s) Status: Collision between a train and lorry on Llanboidy AHB level crossing

This report is based on information provided to the RAIB by the relevant safety authority or public body.

The status of implementation of the recommendations, as reported to us, has been divided into six categories:

Key to Recommendation Status

Implemented:	All actions to deliver the recommendation have been completed.
Implemented by alternative means:	The intent of the recommendation has been satisfied in a way that was not identified by the RAIB during the investigation.
Implementation ongoing:	Work to deliver the intent of the recommendation has been agreed and is in the process of being delivered.
In-progress:	The relevant safety authority has yet to be satisfied that an appropriate plan, with timescales, is in place to implement the recommendation; and work is in progress to provide this.
Non-implementation:	Regulation 12(2)(b)(iii) = recommendation considered and no implementation action to be taken.
Awaiting response:	Awaiting initial report from the relevant safety authority or public body on the status of the recommendation.

RAIB concerns on actions taken by organisations in response to recommendations are reflected in this report and are indicated by one of the following:

-  The red triangle shows recommendations where the RAIB has concerns that no actions have been taken in response to a recommendation.
-  The blue triangle shows recommendations where the RAIB has concerns that the actions taken, or proposed, are inappropriate or insufficient to address the risk identified during the investigation.
-  The white triangle shows recommendations where the RAIB notes substantive actions have been reported, but the RAIB still has concerns.

Note: The tables which follow, report the status of recommendations on 31 December 2015. In some other cases the end implementer has already sent information to the relevant safety authority about the actions it has taken, or proposes to take and the safety authority is considering whether it is satisfied that those actions and the associated timescales are accepted.

Number/ Date/ Report No/ Inv Title / Current Status	Safety Recommendation	Summary of current status (based on latest report from the relevant safety authority or public body)
<p>1 19/12/2011 20/2012</p> <p>Collision between a train and lorry on Llanboidy AHB level crossing</p> <p>Status: Implemented by alternative means</p>	<p>The purpose of this recommendation is to make the crossing, as viewed by a road user, more closely parallel to the rest of the road and hence provide a clear exit if the user is on the crossing when the barriers start to lower.</p> <p>Network Rail should develop an alternative arrangement for Llanboidy level crossing to reduce the apparent misalignment of the road over the crossing relative to the approaches and to bring the road markings and positioning of equipment including road traffic signals into compliance with current traffic signs regulations. Having developed a suitable design, Network Rail should propose to the ORR a revision of the Llanboidy level crossing order accordingly.</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation.</p> <p>Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>2 19/12/2011 20/2012</p> <p>Collision between a train and lorry on Llanboidy AHB level crossing</p> <p>Status: Non-implementation </p>	<p>The purpose of this recommendation is to give guidance on how to deal with crossings where site constraints force the road over the crossing to not be parallel with its approaches and to ask crossing designers to consider the escape route beyond the crossing rather than just the gap at the barrier line (chapter 2, paragraph 245 of the ORR guide).</p> <p>ORR should revise Railway Safety Publication 7 'Level crossings: A guide for managers, designers and operators' to provide:</p> <p>I guidance on how to assess the misalignment between the centreline of the road over the crossing and the road approaches and how to mitigate its effects; and</p> <p>I guidance supplementing the existing requirement for a 3 m minimum gap between barrier tip and road edge to ensure consideration of the actual vehicle exit path taking into account the largest vehicle permitted to use the crossing without telephoning the signaller.</p>	<p>ORR has informed the RAIB that consideration will be given to addressing the recommendation when it next revises its guidance related to level crossings. However, the ORR gave no firm commitment to do so, and has informed the RAIB that it considers the recommendation not to have been implemented. The RAIB is disappointed that there has been no commitment to address the issue identified by the investigation. \$r</p>
<p>3 19/12/2011 20/2012</p> <p>Collision between a train and lorry on Llanboidy AHB level crossing</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is to ensure that the effect of misalignment of the road is taken account of in the Network Rail level crossing risk management process.</p> <p>Network Rail should revise its risk management process for level crossings to take account of risks arising from the misalignment of the road over the crossing relative to the rest of the road.</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate</p>

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<p>4 19/12/2011 20/2012</p> <p>Collision between a train and lorry on Llanboidy AHB level crossing</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is to prevent parked staff vehicles causing traffic to block back onto a level crossing, in particular vehicles of maximum legal dimensions.</p> <p>Network Rail should provide guidance to its staff and contractors on where to park their vehicles when working on or around level crossings where there is potential for such vehicles to block the access and egress from the crossing.</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation.</p> <p>Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>5 19/12/2011 20/2012</p> <p>Collision between a train and lorry on Llanboidy AHB level crossing</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is to find a means of mitigating the risk to the driver from detachment of the cab GRP structure during a collision.</p> <p>Angel Trains should investigate and, where appropriate implement, means of mitigating the risk to cab occupants from detachment of the cab GRP panels in class 175 units during a collision.</p>	<p>Angel Trains has carried out a review in response to this recommendation and proposes no further action.</p> <p>Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p> <p>The RAIB notes that Angel Trains conducted an emergency assessment and concluded that there is an effective way to mitigate a future detachment in similar circumstances.</p> <p>However, Angel Trains has concluded that implementation of these measures would not be cost effective. The RAIB is seeking confirmation as to whether alternative lower cost solutions were considered to mitigate the risk of invasion of survival space.</p>
<p>6 19/12/2011 20/2012</p> <p>Collision between a train and lorry on Llanboidy AHB level crossing</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is to reassess the risks associated with coupler bump stop mounting and retention arrangement.</p> <p>Alstom and Angel Trains should assess the safety risks of the existing design of the coupler lateral bump stop mounting. Where it is reasonably practicable to reduce the risk of a bump stop detaching and derailing the train, then these improvements should be implemented.</p>	<p>Alstom and Angel Trains have reported that they have taken actions in response to this recommendation.</p> <p>Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>